RECEIVED
CENTRAL FAX CENTER

JAN 2 7 2005

IN THE SPECIFICATION

Please replace paragraph beginning on page 18, at line 9, and continuing to page 19, line 26 with the following paragraph:

In the example image 400 of FIGURE 2, part of hockey player 404 is covering a portion of dasher board 402 having target area 504 assigned thereto that is to be subjected to duration measurements according to the invention. In order to measure the duration target area 504 is included in an image stream including image 400 and to provide a quantitative measure of the duration that reflects the "viewability" of an image included within target area 504, the portion of hockey player 404 within target area 504, which is referred to as an occlusion, must be differentiated from the rest of target area 504 of original image 400, and the corresponding area removed from the remaining, unoccluded image within target area 504. To make this separation, occlusion separator 144 compares masked target area image 400b to masked reference image 700a. Any differences are presumed to be occlusions, i.e. images of objects between the camera and the surface (or synthetic surface) having target area 504 assigned thereto. Small differences between the masked reference image and the masked target image introduced by electronic noise in the camera may be accommodated using a number of techniques commonly practiced in the field of image processing, for example small region suppression. Imprecise positioning of the target area due to errors in the telemetry measurement system may be accommodated by filtering the telemetry data using commonly practiced target tracking techniques, for example Kalman filtering. In the illustrated example, masked target area image 400b, shown in FIGURE 8, is compared to masked reference image 700a, shown in FIGURE 6. The resulting occlusion image 400c shown in FIGURE 9 includes only the occlusion which, in this illustrative example, is the portion/s of hockey player 404 captured in image 400 within target area 504. The rest of occlusion image 400c is blank. The occlusion separator 144 also creates an occlusion mask. The occlusion mask identifies the portions within the original image 400 that constitute the occlusion/s. In the example, the occlusion mask is generated from occlusion image 400c of FIGURE 9. Masked background image 400a, masked target image 800a 700a and occlusion image 400c may be combined by image combiner 146 to form a composite, or final, image 400e that may be inserted into the image stream in place of image 400. Target image 604 may include a synthetic image and, accordingly, the composite image generated provides a manipulated image including the synthetic image having an occlusion such that a portion of the synthetic image is

included within the final image and appears as if the synthetic image were part of original image 400. The masked background image, masked target image and occlusion image are combined by the image combiner 146 to form a composite, or final, image. The final image may be used by image manipulation technologies for insertion into the image stream. Accordingly, the final image, or constituent components thereof, may be used by the image measurement system 100 for duration calculations of target areas included therein. The final image may then be inserted into the image stream when the reference image included synthetic images. However, the final image, or portions thereof, may be used only for calculating duration measurements associated with a target area and may not be inserted into the image stream. The latter scenario may be used to calculate duration measurements for physical signage having a target area assigned thereto in which case the final image composition facilitates a duration calculation of image data corresponding to a physical image associated with the target area while the image stream is not subjected to image insertion technologies. Accordingly, calculation of a duration measurement provides an indication of the duration that physical image/s are included within the image stream.

Please replace the paragraph beginning on page 26, line 6, with the following paragraph:

The invention as thus described may be further enhanced by accounting for camera zoom that effects the viewability of a target image included within a target area. In FIGUREs 15A and 15B 18A and 18B, there is respectively illustrated a final image 400e that may be obtained at different camera zooms. Within each final image, a target area 504 having a target image 604 therein is included in the final image 400e. The image 400e depicted in FIGURE 15 18 may be analyzed according to the teachings described hereinabove to determine a duration calculation of target areas included within the image stream that includes final image 400e. Assuming equivalence in a particular scenario (that is, equivalence of target area occlusion, etc.), a target image 604 that is much less visible (FIGURE 15A) due to camera zoom but nevertheless appearing in image 400e will have a duration counter associated therewith incremented equivalently to a target image 604 appearing in the foreground (FIGURE 15B) of final image 400e according to the teachings hereinabove. Because such an implementation of an on-air duration count of a target image may be objectionable to potential advertisers, the present invention provides a further enhancement for modifying a counter associated with a target area, and thus an associated target image, according to variations in the camera zoom that effect the viewability of a target image.